

ABSTRACT OF THE DISCLOSURE

The **[invention]** **disclosure** is directed to so-called laser-compatible NIR marker dyes based on polymethines for use in optical, in particular, fluorescence optical determination and detection methods, for example, in the fields of medicine, pharmaceuticals and in the areas of life science, materials science and environmental science. The **disclosure further discusses the** aim of the invention **which** was to create NIR marker dyes based on polymethine which have a high degree of photostability and stability in storage as well as a high fluorescent yield and which can be excited to fluorescence in the easiest possible manner by means of laser radiation in the visible or NIR spectral range, particularly with light of an argon, helium/neon, or diode laser. [According to the invention, dyes] **Dyes** based on polymethine of general formula (I) are used.